



PCT/09

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,779

DATE: 04/11/2002

TIME: 16:00:51

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04112002\I674779.raw

ENTERED

```

4 <110> APPLICANT: Jean-Louis RUELLE
6 <120> TITLE OF INVENTION: BASB019 Proteins and Genes from
7   Moraxella Catarrhalis, Antigens, Antibodies, and Uses
10 <130> FILE REFERENCE: BM45311
12 <140> CURRENT APPLICATION NUMBER: 09/674,779
C--> 13 <141> CURRENT FILING DATE: 2002-03-05
15 <150> PRIOR APPLICATION NUMBER: 98096837
16 <151> PRIOR FILING DATE: 1998-05-06
18 <160> NUMBER OF SEQ ID NOS: 4
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 753
24 <212> TYPE: DNA
25 <213> ORGANISM: Moraxella catarrhalis
27 <400> SEQUENCE: 1
28 atgaaaaatt ttaatcaata ctttataact acacttatca gcagtatgct ggttgcatgc      60
29 agtgcaccca taccaaccaa tccacaagta tccccaataa aaacgccatc ggtactgatt      120
30 actaaagata aaatcgggtg tcatcataca catgagcacg atgaatctgt aagccatgct      180
31 ggtttgacagg cacattttga gacttggcta cagatgcacc atgccacca acaagaggta      240
32 gttaggtatc aggcgatatt acaatcaaga cttggtaatt atctgccacc aatgagtcaa      300
33 ctactaacga ctgcacggtc atggcaggca tgtggtcatg aaccttatca gctgccacca      360
34 gaacatcttt ggggtcagat tgtaccaaca ttgcacttgt atcaagatct caaaagtagg      420
35 ggcataattgc cagcaaatac ccaaattcgc tcagtttatc gcaatcctga actcaaccaa      480
36 tgtgctggtg gtgcagctat gagtaagcat ttgaccaata gtgccattga tatttgggtg      540
37 cctgaccttg aaataaaaaa ccaggcactg tatgagcttc aaaaccgcct atgccaatat      600
38 tggctagagc atggcgaaaa ccaaaatttt gggctgggtt tatacgccac aggggcgatt      660
39 catctggata cccaagggtt tagaaaatgg ggtgctcaat tttctgaaac aaactctatt      720
40 tgtcgtcatg tcttaccaaa aaataagcta taa                                753
42 <210> SEQ ID NO: 2
43 <211> LENGTH: 250
44 <212> TYPE: PRT
45 <213> ORGANISM: Moraxella catarrhalis
47 <400> SEQUENCE: 2
48 Met Lys Asn Phe Asn Gln Tyr Phe Ile Thr Thr Leu Ile Ser Ser Met
49 1          5          10          15
50 Leu Val Ala Cys Ser Ala Pro Ile Pro Thr Asn Pro Gln Val Ser Pro
51          20          25          30
52 Ile Lys Thr Pro Ser Val Leu Ile Thr Lys Asp Lys Ile Gly Asp His
53          35          40          45
54 His Thr His Glu His Asp Glu Ser Val Ser His Val Gly Leu Gln Ala
55          50          55          60
56 His Phe Glu Thr Trp Leu Gln Met His His Ala Thr Lys Gln Glu Val
57 65          70          75          80

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```

58 Val Arg Tyr Gln Ala Tyr Leu Gln Ser Arg Leu Gly Asn Tyr Leu Pro
59                      85                      90                      95
60 Pro Met Ser Gln Leu Leu Thr Thr Ala Arg Ser Trp Gln Ala Cys Gly
61                      100                      105                      110
62 His Glu Pro Tyr Gln Leu Pro Pro Glu His Leu Trp Gly Gln Ile Val
63                      115                      120                      125
64 Pro Thr Leu His Leu Tyr Gln Asp Leu Lys Ser Arg Gly Ile Leu Pro
65                      130                      135                      140
66 Ala Asn Thr Gln Ile Arg Ser Val Tyr Arg Asn Pro Glu Leu Asn Gln
67 145                      150                      155                      160
68 Cys Ala Gly Gly Ala Ala Met Ser Lys His Leu Thr Asn Ser Ala Ile
69                      165                      170                      175
70 Asp Ile Trp Val Pro Asp Leu Glu Ile Lys Ser Gln Ala Leu Tyr Glu
71                      180                      185                      190
72 Leu Gln Asn Arg Leu Cys Gln Tyr Trp Leu Glu His Gly Glu Asn Gln
73                      195                      200                      205
74 Asn Phe Gly Leu Gly Leu Tyr Ala Thr Gly Ala Ile His Leu Asp Thr
75                      210                      215                      220
76 Gln Gly Phe Arg Lys Trp Gly Ala Gln Phe Ser Glu Thr Asn Ser Ile
77 225                      230                      235                      240
78 Cys Arg His Val Leu Pro Lys Asn Lys Leu
79                      245                      250

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81 &lt;210&gt; SEQ ID NO: 3

82 &lt;211&gt; LENGTH: 40

83 &lt;212&gt; TYPE: DNA

84 &lt;213&gt; ORGANISM: Artificial Sequence

86 &lt;220&gt; FEATURE:

87 &lt;223&gt; OTHER INFORMATION: primer

89 &lt;400&gt; SEQUENCE: 3

90 aggcagaggg aattcatgaa aaattttaat caatacttta

40

92 &lt;210&gt; SEQ ID NO: 4

93 &lt;211&gt; LENGTH: 60

94 &lt;212&gt; TYPE: DNA

95 &lt;213&gt; ORGANISM: Artificial Sequence

97 &lt;220&gt; FEATURE:

98 &lt;223&gt; OTHER INFORMATION: primer

100 &lt;400&gt; SEQUENCE: 4

101 aggcagaggg tcgacttaat ggtgatggtg atggtgtagc ttatttttttg gtaagacatg

60

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/674,779

DATE: 04/11/2002

TIME: 16:00:52

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04112002\I674779.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date